

CLAIMS

What is claimed is:

1. A wearable health monitoring device comprising:
a plurality of sensors configured to monitor health indicators;
at least one sensor interface for receiving health indicator data from said plurality of sensors;
at least one memory for storing the health indicator data; and
a processor for analyzing the health indicator data, wherein said processor is configured to dynamically regulate a substance delivery mechanism responsive to the health indicator data.
2. The monitoring device according to claim 1, wherein said sensors include at least one sensor to monitor heart rate, heart murmur, heart intensity, electro-cardio signals, lung noise, respiration rate, occlusion, adrenal level, acetylcholine level, temperature, and sodium levels.
3. The monitoring device according to claim 1, further comprising a wireless transceiver for communicating with at least one of an emergency service, a health care professional, a third party, and a processing device.
4. The monitoring device according to claim 3, wherein the wireless transceiver is configured to detect available communication links.
5. The monitoring device according to claim 1, further comprising a viewing screen for displaying at least one of data from said sensors, data received by said transceiver from a remote source, and device diagnostic information.
6. The monitoring device according to claim 1, wherein said processor is programmed with an individualized patient profile establishing ranges of normal health indicators, wherein said processor compares the health indicator data with the patient profile.

7. The monitoring device according to claim 6, wherein said processor signals said medication delivery system to regulate the delivery of at least one substance.

8. The monitoring device according to claim 7, further comprising a wireless transceiver through which said processor communicates with the medication delivery system.

9. The monitoring device according to claim 8, wherein the medication delivery system is at least one of a dermal patch, a medication port, and a medication pump.

10. The monitoring device according to claim 1, further comprising a wireless transceiver for communicating with an authorized computing system, wherein said processor signals said medication delivery system to regulate delivery of a substance responsive to receiving a medication delivery signal from the authorized computing system.

11. The monitoring device according to claim 10, wherein the medication delivery system is at least one of a dermal patch, a medication port, and a medication pump.

12. A patient health monitoring system comprising:

a wearable patient health monitoring device having a plurality of sensors configured to monitor health indicators, a data storage for recording monitored health indicators as data, a transceiver for wireless communications, a medication delivery system, and a processor configured to dynamically regulate substance delivery to the patient, said processor responding to indicator data;

at least one health professional computing device communicably coupled to said monitoring device via a communications network;

at least one third party computing device communicably coupled to said monitoring device via a communications network.

13. The monitoring system according to claim 12, further comprising a patient computing device communicably coupled to said monitoring device and communicably coupled to said health professional computing device and said third party computing device via at least one of a wired communications network and a wireless communications network.

14. The monitoring system according to claim 12, wherein at least one of said patient computing device and the health monitoring device is configured to play audible messages.

15. The monitoring system according to claim 14, wherein said processor is programmed with an individualized patient profile establishing ranges of normal health indicators such that said processor compares detected health indicators to said range of normal health indicators.

16. The monitoring system according to claim 15, wherein said health monitoring device signals at least one of said patient computing device, said health professional computing device, and said third party computing device when detected health indicators are outside of said range of normal health indicators.

17. The monitoring system according to claim 15, wherein the patient profile is updated based on detected health indicators.

18. The monitoring system according to claim 12, wherein said monitoring device contacts at least one of said health professional computing device and said third party computing device based on data from said sensors.

19. A method for monitoring the health indicators of a patient, comprising the steps of:

storing an individualized patient profile to establish normal ranges of health indicators;

detecting patient health indicators using at least one sensor;
comparing detected health indicators to the patient profile; and
initiating a programmatic response to at least one of said detecting step and said comparing step, wherein said programmatic response is selected from the group consisting of notifying a health professional, notifying the patient, notifying a third party, and regulating the delivery of a substance to the patient.

20. The method according to claim 19, further comprising the step of signaling at least one of a personal computing device, a third party computing device, and health professional computing device when the detected health indicators are outside of the established normal range.

21. The method according to claim 19, further comprising the step of:
storing at least one prerecorded message; and
playing at least one prerecorded message.

22. The method according to claim 19, further comprising the step of receiving a communication from a remote computing system specifying a suggested course of treatment.

23. The method according to claim 22, further comprising the step of signaling a medication delivery system to regulate the delivery of at least one substance according to said suggested course of treatment.

24. The method according to claim 19, further comprising the step of updating the patient profile according to detected health indicators.

25. A machine readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

storing an individualized patient profile to establish normal ranges of health indicators;

detecting patient health indicators using at least one sensor;

comparing detected health indicators to the patient profile; and

initiating a programmatic response to at least one of said detecting step and said comparing step, wherein said programmatic response is selected from the group consisting of notifying a health professional, notifying the patient, notifying a third party, and regulating the delivery of a substance to the patient.

26. The machine readable storage according to claim 25, further causing the machine to perform the step of signaling at least one of a personal computing device, a third party computing device, and health professional computing device when the detected health indicators are outside of the established normal range.

27. The machine readable storage according to claim 25, further causing the machine to perform the steps:

storing at least one prerecorded message; and

playing at least one prerecorded message.

28. The machine readable storage according to claim 25, further causing the machine to perform the step of receiving a communication from a remote computing system specifying a suggested course of treatment.

29. The machine readable storage according to claim 28, further causing the machine to perform the step of signaling a medication delivery system to regulate the delivery of at least one substance according to said suggested course of treatment.

30. The machine readable storage according to claim 25, further causing the machine to perform the step of updating the patient profile according to detected health indicators.